Jalval2.O: INFORM-ing citizens about river pollution by PERFORM-ing ideas in activities for reducing it and TRANSFORM-ing into the pollution free river".

Mutha river, Pune.

Sponsored Thesis Project Competition on "RE-IMAGINING URBAN RIVERS" Season- 3





Project Title: Jalval2.O: INFORM-ing citizens about river pollution by PERFORM-ing ideas in activities for reducing it and TRANSFORM-ing into the pollution free river". Mutha river, Pune.

Creator : Saee Desai, Bsc geology graduate.









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Preface/Summary

In the world with so many social problems, citizens think it's not their responsibility to act on social issues and to lessen this gap between their thoughts and impending reality, I created a community, Jalval in Pune with the motto of connecting citizens with river emotionally, by informing them about river pollution and performing activities like river cleanup drives with help of them and transforming river banks into pollution free zones. Public interaction was the essence of this research. Youth engagement has also contributed to this research.









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Acknowledgment

My deepest gratitude to NIUA and NMCG for giving me this wonderful opportunity. To my team- Yash Deodhar, Koustuv Mukherjee, Rishika Prasad, Jui Chaukar, Adiva Indrekar, Aarya Kurlekar for helping to conduct various activities. To my professor, guide, mentor Dr. Kiran Kumbhar for believing in me. To my younger brother for always supporting me. And all the Jal-mates who have been engaged in these drives till now.

To me, making rivers clean is always the first priority.









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Introduction

Of course, seven billion people will have seven billion agendas and how to not contribute to pollution is the agenda that I'm pushing which is exactly jalval mission and motto. This report is written fully on public data drawn from public interaction and practical work done by them. Engaging citizens in river management activities is actually divided in three parts, INFORM~PERFORM~TRANSFORM. Though the bigger challenge was not engaging citizens but changing their thought processes for which connecting with them emotionally and presenting practical ideas for reducing river pollution was necessary so that they could feel the connection with river. This is simple report about a complex issue which is right now one of those issues that need immediate action. Jalval is my dream and making rivers clean is my purpose and this report will connect the readers to Jalval and rivers emotionally without any physical interaction.

This time river is tired and goes to sleep,

The next morning, she doesn't wake up and it goes unnoticed

She is more black than before days and weeks pass and she has come to a pause,

Only a few organs are working, coma is the phase she is going through.

we have to come together for her to wake up.

let's buckle up our shoes before she is gone,

because even God can't save us and all we can do is mourn!

~Saee desai









Background information

About Jalval

Before approaching citizens, approaching different colleges and engaging youth was important. I started with the college I was pursuing my bachelor's degree. I engaged almost around 300+ students from Nowrosjee Wadia College by first informing them about river pollution. Together with help of them I started informing citizens and engaging them in river cleanup drives. Jalval being a community which works for betterment of rivers and humankind started arranging river cleanup drives on banks of Mutha river, Pune. On the 10km river stretch we arranged cleanup drives on each location where it was possible and safe to clean. I formed a team of 7 members and divided the work for each drive. These were the youths in Pune who were passionate about cleaning rivers or youth/ students from Nowrosjee Wadia college. For each drive we took permission from PMC{ Pune Municipal Corporation} and local Police station that came under that stretch.

Meet my Jal-mates?





















Material and methods

I believe that any problem can be solved if we connect emotionally and present practical ideas, the same method Jalval used in cleaning the river banks of Mutha river in Pune I intend to work for the cleanliness of rivers until river pollution is no longer a major issue. To achieve this, these the past three months were very crucial for me to experiment my ideas and learn from them.

1.0: locale of the study

The study was conducted on 10km stretch of Mutha river in Pune. It started from Khadakwasla dam to Sangam bridge. So basically, I divided Jalval in three parts that is inform, perform and transform. So, what is Jalval? How is Jalval? And Why is Jalval? is what I'll explain in this report.

Why is Jalval?

I started this community in Pune which aims to connect emotionally with citizens and youth and present practical ideas. So, the question is why is Jalval *Necessary*? Firstly, Mutha is a dead river but let's assume its in Coma and its our responsibility to wake her up. It is dead because of the sewage water and domestic waste released directly into the river without pre-processing it. It has adverse effect on humans, aquatic life, and climate. Jalval's role is very crucial in this scenario as it is working towards bridging the gap between citizens beliefs and reality. The very first step for bridging the gap is to aware them about river pollution and its adverse effect on them{citizens} and how their small step could contribute huge for having a clean picture of rivers. I personally believe that only awareness is not sufficient, about drastic pollutions effect but action to mitigate the effect....











What is Jalval?

Jalval is the community started by me in Pune for betterment of rivers and humankind. Jal is Sanskrit word which means water and Val is Latin word which means strength and worth. So, by combining this word I made a tagline called as," Water that gives us strength let's make it worthy". Jalval is working as a bridge between citizens and conditions of rivers. It is a very basic and social thought which I started in mind long back but brought into reality after being part of this competition. Hence I'll work on rivers till they aren't clean forever.



How Jalval works?

Jalval is divided in three parts that is INFORM~PERFORM~TRANSFORM where informing and performing is a practical thing whereas transform is the result obtained. Inform is all about awareness, while perform is practically engaging citizens and transforming is creating a vibrant zone on banks of Mutha river. We have arranged 9 drives in total, 6 river cleanup and 3 awareness drives along banks of Mutha river. 300+ youth and 250+ citizens have been engaged and educated till now.











Jalval's Investment:

As mentioned earlier, that small contribution can lead to huge clean picture. The same way here is the jalval's small contribution that can be considered as an investment for having better and clean rivers.

Drive 1: River cleanup drive

Location: Omkareshwar temple on banks of Mutha river, Pune.

Date: 02/04/23, Sunday

No. of citizens/Youth engaged:75 No. of garbage bags collected: 65+ Collaboration: UMEED Foundation

cleanup drive



citizens engagement



interaction with citizens/youth



refreshments



As it was the first drive I conducted, engaged citizens and youth were my friends and family living in Pune. I consider this as one of the most challenging drive among all 9 drives because making them aware and connect them emotionally with river was not easy as influencing them to be part of the drive.









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Mutha river, Pune.

Drive 2: Awareness drive Location: Nal stop, Pune

Date: 09/04/23

No of youth engaged: 25 No of citizen informed: 60+

Collaboration: Jeevit Nadi, SPE, Wadia College



This was the first awareness drive we conducted that was aiming to aware citizens in a locality near Nal stop on banks of Mutha river. Citizens were very cooperative and excited for knowing and sharing their views about river. Elder citizens are specifically part of this locality and were amused by our initiative about cleaning rivers. They got emotionally connected with us because according to them we were the reflection of their love ones. So the drive was basically based on one on one interaction with the citizens and the youth like us. Jalval started with knowing their views via google form that Jalval designed and based on that data we informed/educated those citizens. They were agreed by our initiative and were ready to join us for further drives.

Drive 3: River cleanup drive

Location: Nal stop, Pune

Date: 16/04/23

No. of citizens/youth engaged: 200+









No. of garbage bags collected: 150+

Collaboration: Jeevit Nadi, SPE, Wadia College, Yuva Asmita Foundation



Every flowing water is called as Ganga in Sanskrit and for Punekars Mutha is their Ganga is what I tried to inculcate in them. This was the area exactly ahead the awareness drive we conducted. We didn't expect 200 students to join the drive and team Jalval was amazed by the response. As I mentioned above 150+ bags were collected from 100m stretch with help of these enthusiastic youth.

Drive 4: Awareness drive

Location: Shaniwar Peth, Pune

Date:30/04/23

No. of youth engaged: 170 No. of citizens informed: 150

Collaboration: Jeevit Nadi, SPE, Wadia College, Yuva Asmita Foundation









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Local citizens from Shaniwar Peth were the ones we interacted with, as the agenda for this drive was to educate youth while interacting with citizens.

Drive 5: River cleanup drive

Location: Warje Malwadi, Pune

Date: 07/05/23

No. of youth engaged: 60 No. of citizens informed: 40

Collaboration: Jeevit Nadi, Wadia College, Yuva Asmita Foundation











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Drive 6: River cleanup drive Location: Bhide bridge, Pune

Date: 14/05/23

No. of citizens/youth engaged:70+ No. of garbage bags collected: 50+

Collaboration: Jeevit Nadi, Wadia College, Yuva Asmita Foundation





Drive 7: River cleanup drive

Location: Khadakwasla Dam, Pune

Date:21/05/23

No. of citizens/ youth engaged:150+ No. of garbage bags collected:90+

Collaboration: Jeevit Nadi, Wadia College, Yuva Asmita Foundation









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Drive 8: River cleanup drive

Location: Khadakwasla Dam, Pune

Date: 28/05/23

No. of citizens/ youth engaged:250 No. of garbage bags collected: 110+

Collaboration: Jeevit Nadi, Wadia College, Yuva Asmita Foundation









Drive 9: River cleanup drive Location: Shaniwar wada, Pune

Date: 04/06/23

No. of citizens/ youth engaged: 15 No. of garbage bags collected: 10

Collaboration: Jeevit Nadi, Wadia College, Yuva Asmita Foundation









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Mutha river, Pune.



Key issue:

After these 9 drives following is what I analyse:

- Unawareness: Unawareness among citizens is one of the key issues I observed from these drives.
- Common Youth not prioritizing environmental issues as they do for academics.
- Negligence of local authority: I won't say government is not working towards reducing river pollution issues but it is not fully being achieved. This is a democratic nation but government has power to make rules and I think they should do this more effectively.
- So called *Development:* Development is necessary but it should go hand in hand with conservation. We humans under name of development construct dams which are necessary but dams can reduce the flow of water downstream, leading to water shortages in communities and ecosystems situated farther along the river.
- Superstitions: We Indians believe that river is goddess but don't treat her that way, why? It's our superstitious beliefs that have been carried by centuries which is making rivers polluted and we are the ones who'll suffer from this. For example religious waste and immersion of idols, etc.

Plan of action:

Remember the poem I wrote for readers at the beginning of this report? Now it seems that this promise might be fulfilled. Now that she is waking up its our duty to keep her awake. Here are some initiatives that we would take in coming days:

- Activities:
 - 1. Awareness in schools and colleges: Aware youth from schools and colleges about river pollutions effects on us and how that we have very less to reverse this cycle. Youth has power to change this situation, all we need is to realise our responsibility towards it and act accordingly.









- 2. Data collection activity: Collecting data with help of citizens/ youth which will be recorded and analysed, based on that actions will be taken.
- 3. Elder citizen interaction with Youth: This will be an interactive activity where elder citizens will be sharing their experience, knowledge with youth so that they can be closer to past pollution free state of rivers.
- 4. River cleanup drives: Jalval intends to adopt the stretches on banks of Mutha river first and then all the rivers in Pune. By adopting the stretch we'll allocate youth from nearby areas to that stretch and start cleaning river banks. Jalval's responsibility will be to create that emotional connection with rivers so that they prioritize it.

Funding:

- 1. Inventory: Funding will be needed for buying degradable gloves, masks and garbage bags.
- 2. Internships: By offering basic paid internships to youth or interested volunteers we can attract their interest, innovation and skills to make this happen or autonomous.

Systems

1. Sewage treatment plant: Sewage treatment plants that is STP is very crucial to have as of now we have only 2 STP's on banks of Mutha river. Either there should be few more STP's or the capacity of existing STP's should be increased. To have this in reality Jalval would also require to write letters to higher authorities and I would be more than happy if NIUA and NMCG help me through this.

• Projects for youth:

- 1. Internships: Engage youth from different academic backgrounds and support them in project implementation
 - a) Engineering: The idea is to introduce river pollution as a problem domain and ask them to come up with different ideas, thoughts, innovations, solutions by implementing them, they can complete their mega projects by also helping society to tackle realistic problems.
 - b) Architecture: How we can preserve rivers heritage values more effectively that we can get more insights from them.
 - c) Economists: For building the policies or knowing more about them an economics student needs to be in Jalval team.
 - d) Charted Accountant: For effective management of funds and map the expenses a CA would be more appropriate volunteer.
 - e) Psychology: How proficiently Jalval can engage citizens in this initiative.

Way forward:

Incentives or fines:

- *Incentives* for engaging or encouraging citizens by offering them something in return of their help in reducing pollution. We can politely approach citizens through this.
- Fines for realising the seriousness of their mistakes,









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Development and conservation:

- Development is something we need but don't deserve as of now we need smart citizens not smart cities. As this development is causing problems for conserving rivers and it should go hand in hand.
- *Conservation* should support development.

Conclusion:

I would like to conclude this by writing that youth and citizens will definitely understand their responsibilities towards social issues which are actually causing because of them and eventually we are the ones suffering. Jalval's motto is quite clear that we want clean rivers, with help of citizens/youth and government because it is not something that can be done alone by Jalval. Because of our initiatives the Mutahi is now awake and here is what she wants to say!!

River wakes up rubbing its eyes,
Tied with so many whys
Ask herself a question, why there is so much pollution
God whisper the solution in our ears but we couldn't hear
Different mind, different ideas, and different ways to pollute is our instinct
Differentiated by cities, united by abnormalities and that has become her entity
All my riddles about her were solved as I got dissolved
Heart got involved as she evolved
That's when I realized, I need to be polite
We have to stay together for her to unite









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Mutha river, Pune.

Reference:

This data is collected on one-on-one public interaction and practical work done on field.









CERTIFICATE OF COMPLETION

This is to certify that this thesis project titled "Jalval2.O: INFORM-ing citizens about river pollution by PERFORM-ing ideas in activities for reducing it and TRANSFORM-ing into the pollution free river".

"was carried out by Sh./Smt. Saee Vikas Desai, a student of BSC Geology, at the Nowrosjee Wadia College. The research for this project was undertaken under the guidance of the afore-mentioned institute and completed during the period of 04/04/23 to Still working.

This project was shortlisted under the *Sponsored Thesis Project Competition on* "*RE-IMAGINING URBAN RIVERS*" (Season- 3) hosted by the National Institute of Urban Affairs (NIUA) and the National Mission for Clean Ganga (NMCG).

This report has been submitted by the student as a final deliverable under the competition. All parts of this research can used by any of the undersigning parties.

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